

Great Lakes Piping Plover Conservation 2015

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Piping Plover (*Charadrius melodus*)

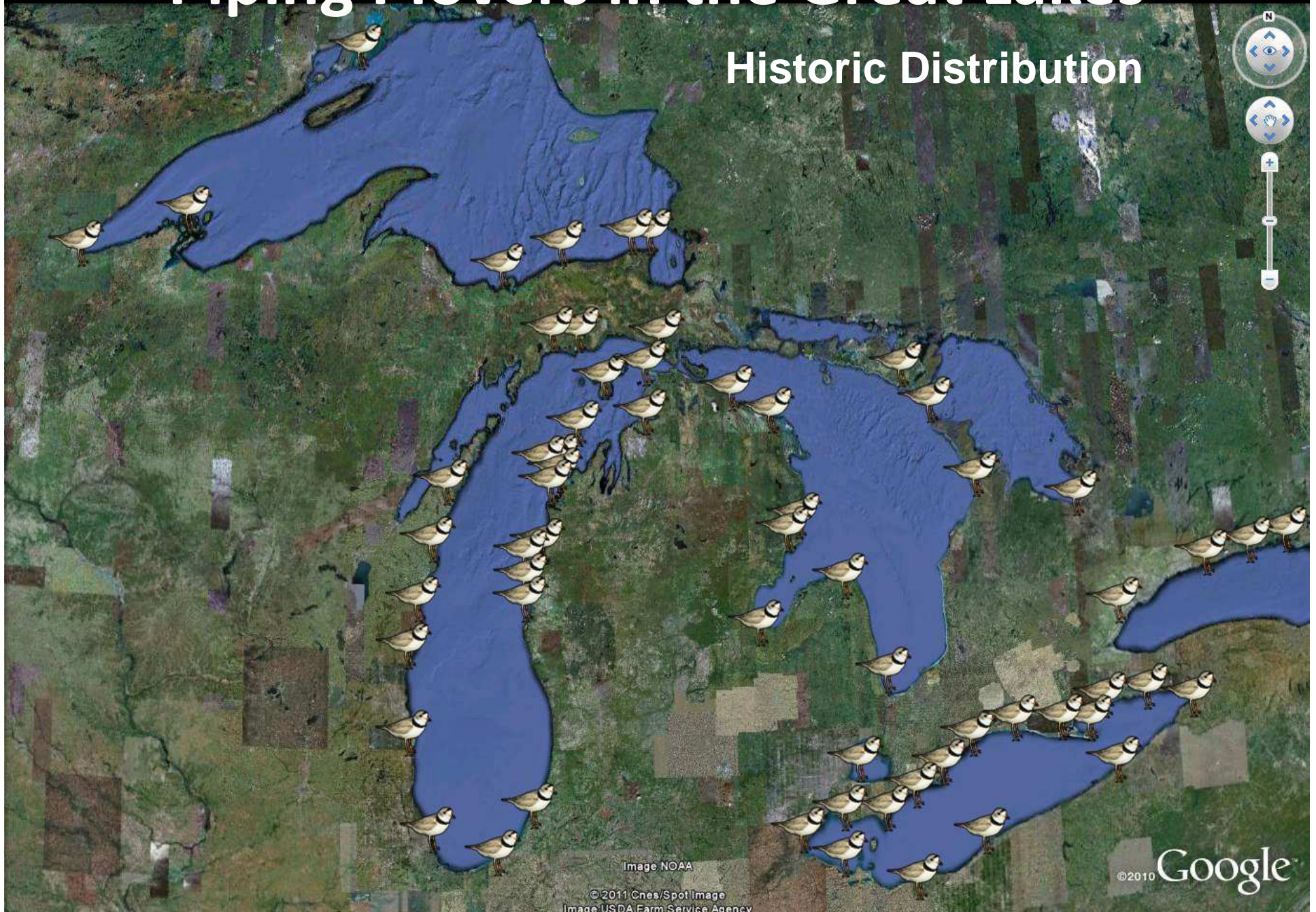


Range of the Piping Plover



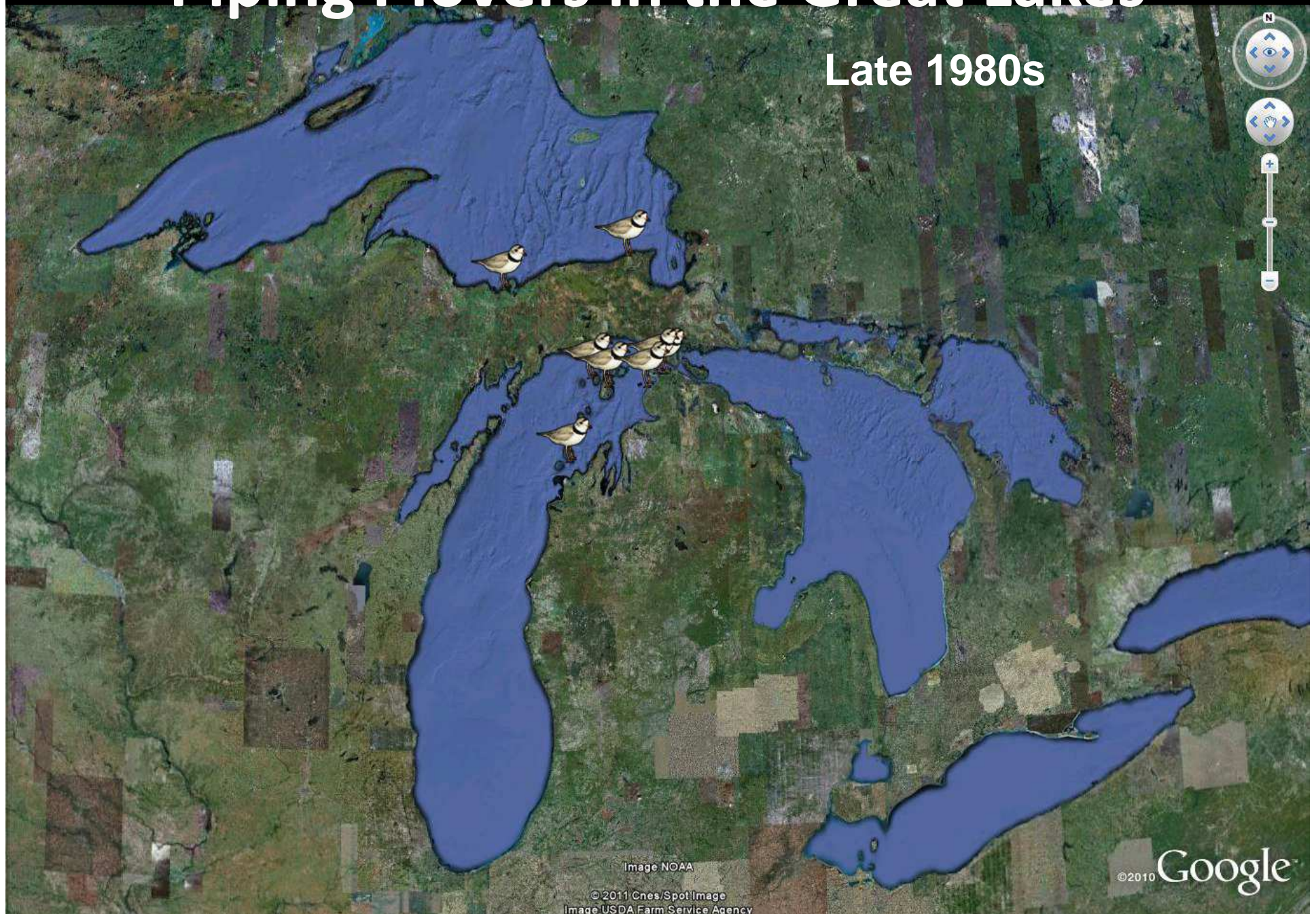
Piping Plovers in the Great Lakes

Historic Distribution



Piping Plovers in the Great Lakes

Late 1980s



Recovery Plan

U. S. Fish and Wildlife Service

Recovery Plan for the Great Lakes Piping Plover (*Charadrius melodus*)



September 2003



Department of the Interior
U.S. Fish and Wildlife Service
Great Lakes-Big Rivers Region
Fort Snelling, MN

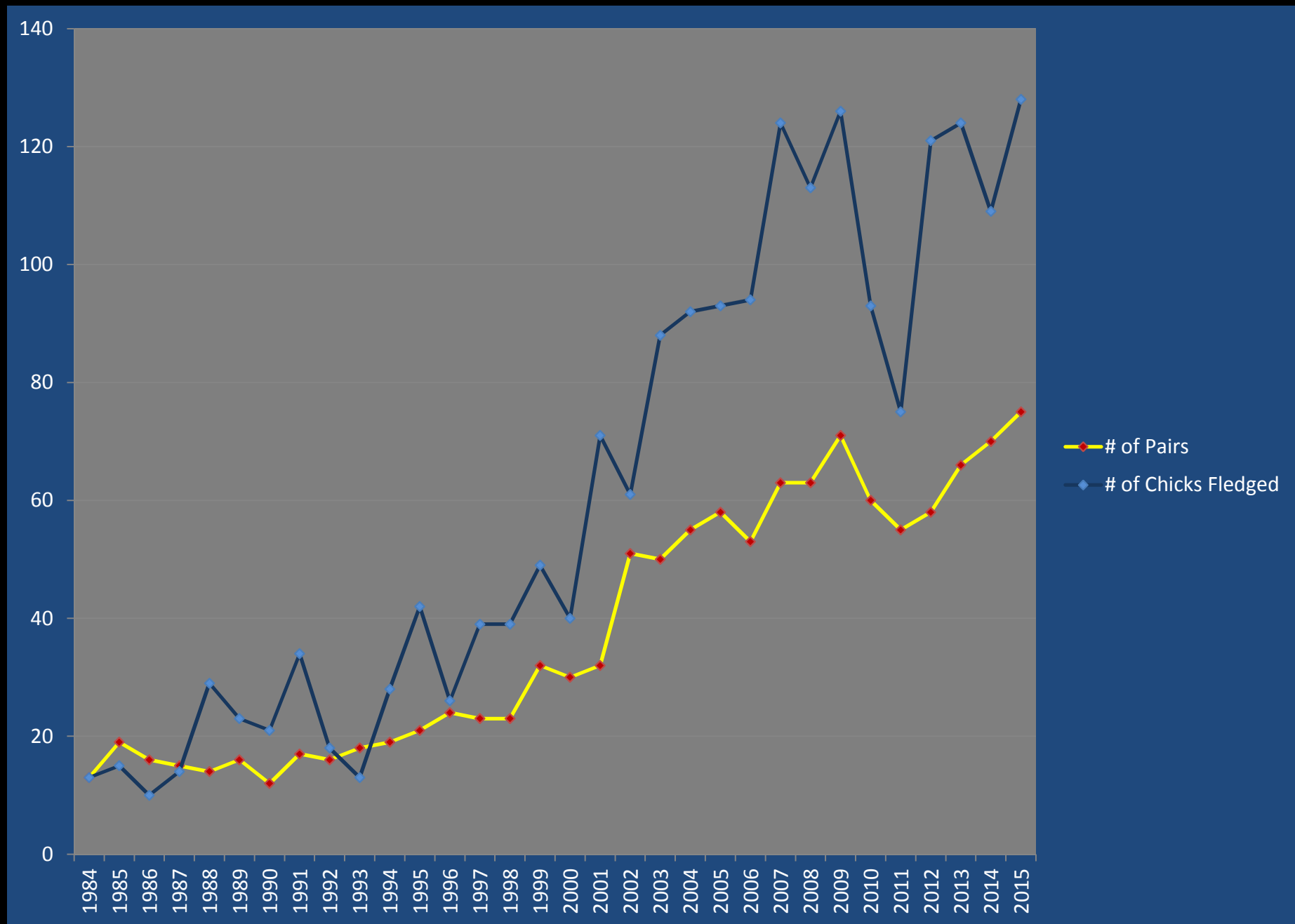


Recovery Plan

**At least 150 pairs for 5 consecutive years,
with
100 of them in Michigan and 50 in other Great Lakes States**



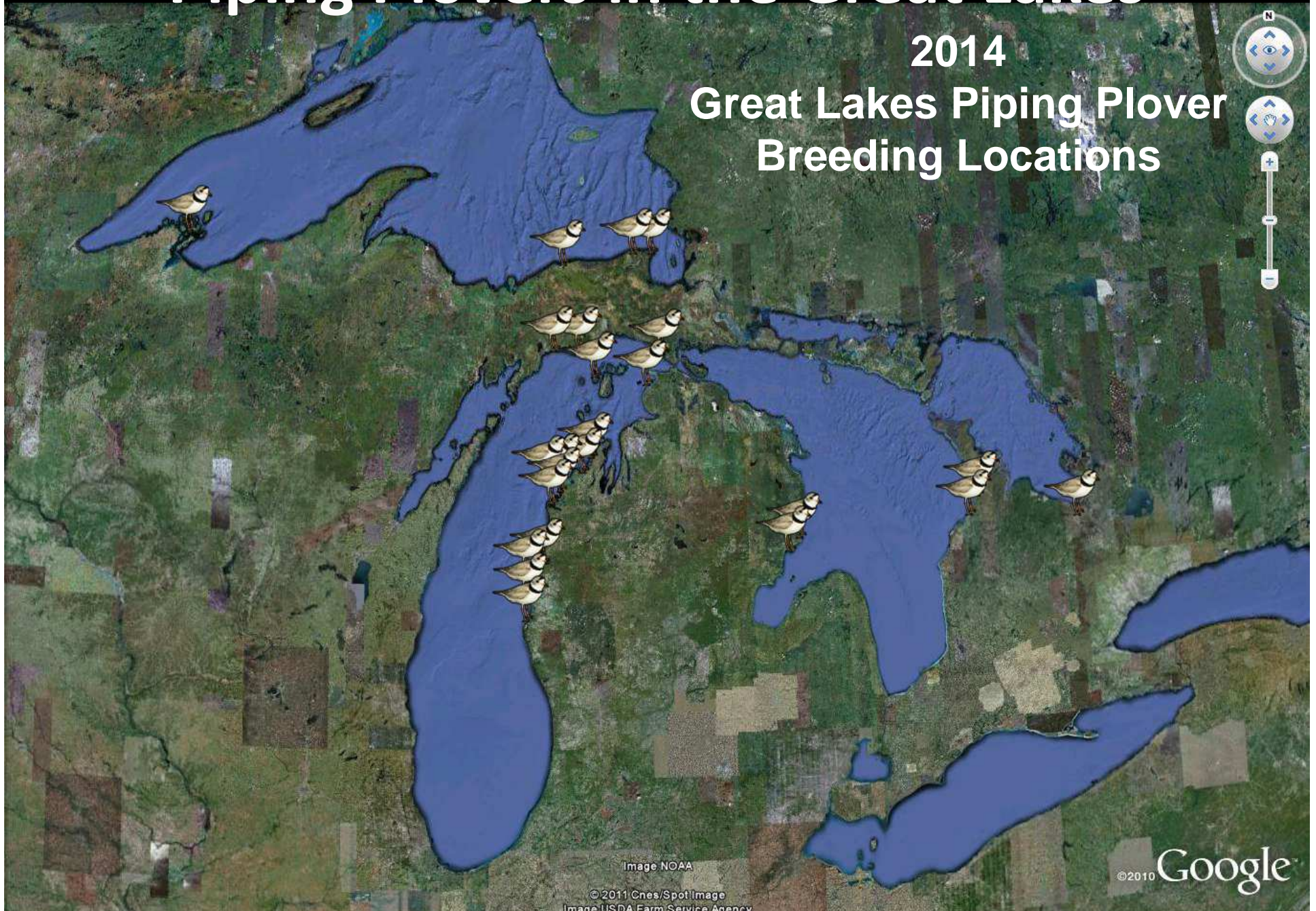
A Van Zoeren



Piping Plovers in the Great Lakes

2014

Great Lakes Piping Plover
Breeding Locations



New or Historic Site reoccupied in 2015

- Greene's Bay, Beaver Island, MI
- Muskegon State Park, MI
- Toronto Islands, Ontario, Canada
- Montario Point, NY
- Illinois Beach State Park, IL
- Additionally birds were seen lingering in other locations in Michigan, Wisconsin and Minnesota past migration season

Primary Conservation Objectives of the Great Lakes Piping Plover Recovery Group

- Coordinate Partner groups to implement breeding ground protections
 - Habitat protection or creation
 - Locating all Great Lakes piping plover nesting pairs
 - Putting up nesting exclosures on all piping plover nests, closing adjacent beach areas
 - Monitoring as many nests as possible with full-time and volunteer monitors
 - Implementing Predator Control and Salvage Captive Rearing
 - Research

Research that aids in the recovery effort

- Breeding separation of the three Piping Plover Populations
- Mate and nest site fidelity
- Longevity
- Mortality rates and causes
- Wintering locations
- Migration routes
- Dispersal from natal sites
- Critical habitat requirements
- Genetic Diversity in the Population
- Sex ratios at hatching and fledging



Multi-partner Recovery Program

- **National Park Service**
- **US Forest Service**
- **Michigan and Wisconsin Departments of Natural Resources**
- **University of Minnesota**
- **Canadian Wildlife Service**
- **American Zoo and Aquarium Association**
- **Great Lakes Tribes**
- **Non-governmental Organizations (Nature Conservancy)**

Breeding Chronology Overview



- 3-4 month breeding period
- Begin to arrive in early April
- Initiate nesting in May and may extend to July
- Incubation through fledging – approximately 60 days
- Adults begin departing as early as July

Plover Monitors



Typical Piping Plover Nesting Habitat



Pair Formation



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Territorial Disputes

Territorial Fight

Parallel Walk



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Nests



Exclosure



Hatching



New Chicks

2-day chicks



Brooding



Chick Development



1 Day



3 Days



6 Days

Chick Development



24 Days



28 Days

Salvage Captive Rearing

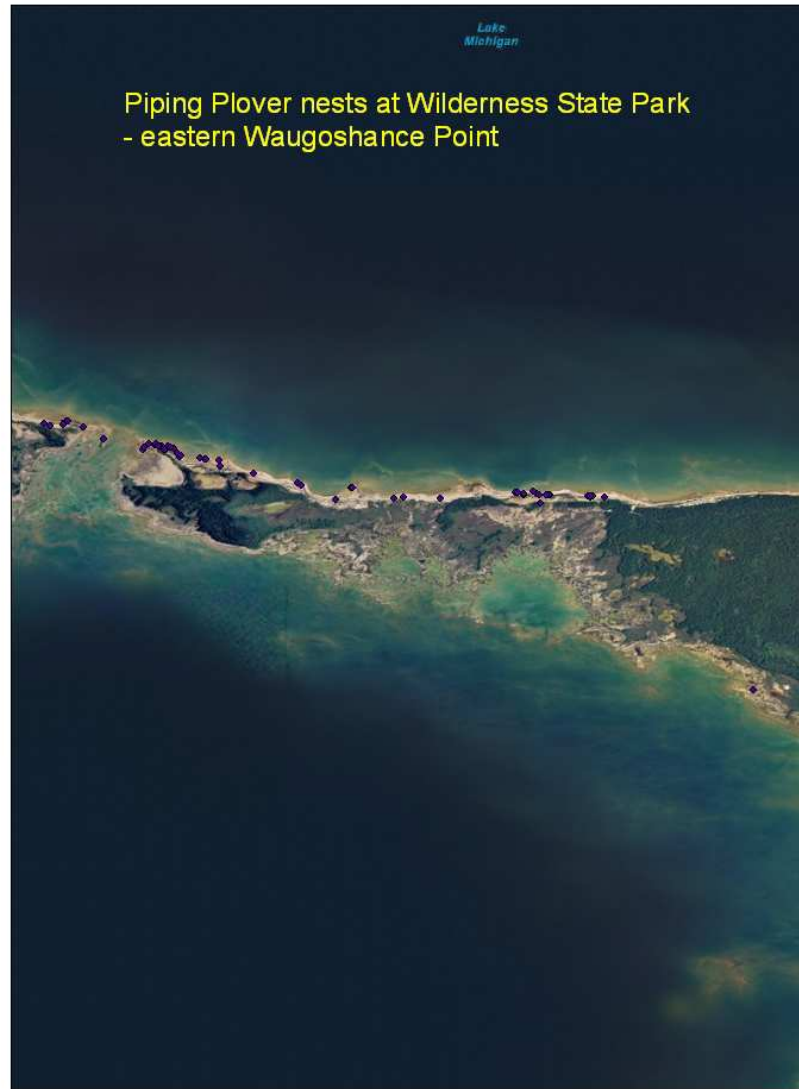


Releasing Captive-reared Chicks



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Wilderness State Park Piping Plover Habitat Demonstration

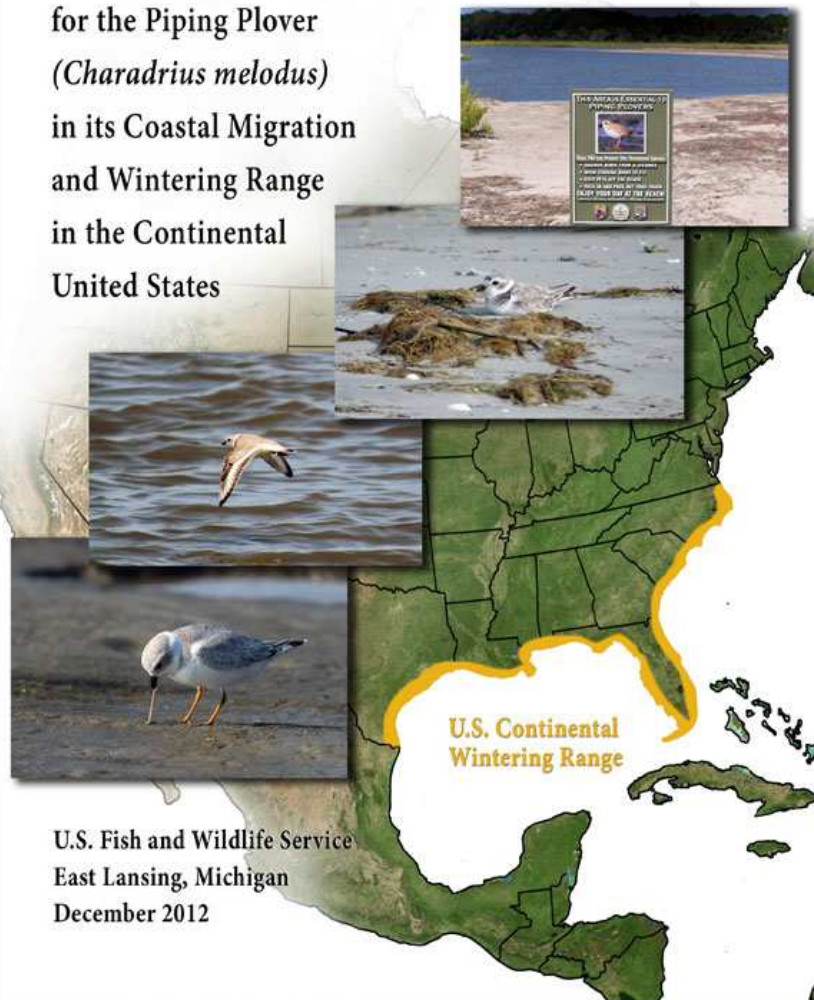


Wilderness State Park



Development of Winter CCS

Comprehensive Conservation Strategy
for the Piping Plover
(*Charadrius melodus*)
in its Coastal Migration
and Wintering Range
in the Continental
United States



Great Lakes plover habitat in South Carolina



Same photo – zoomed in

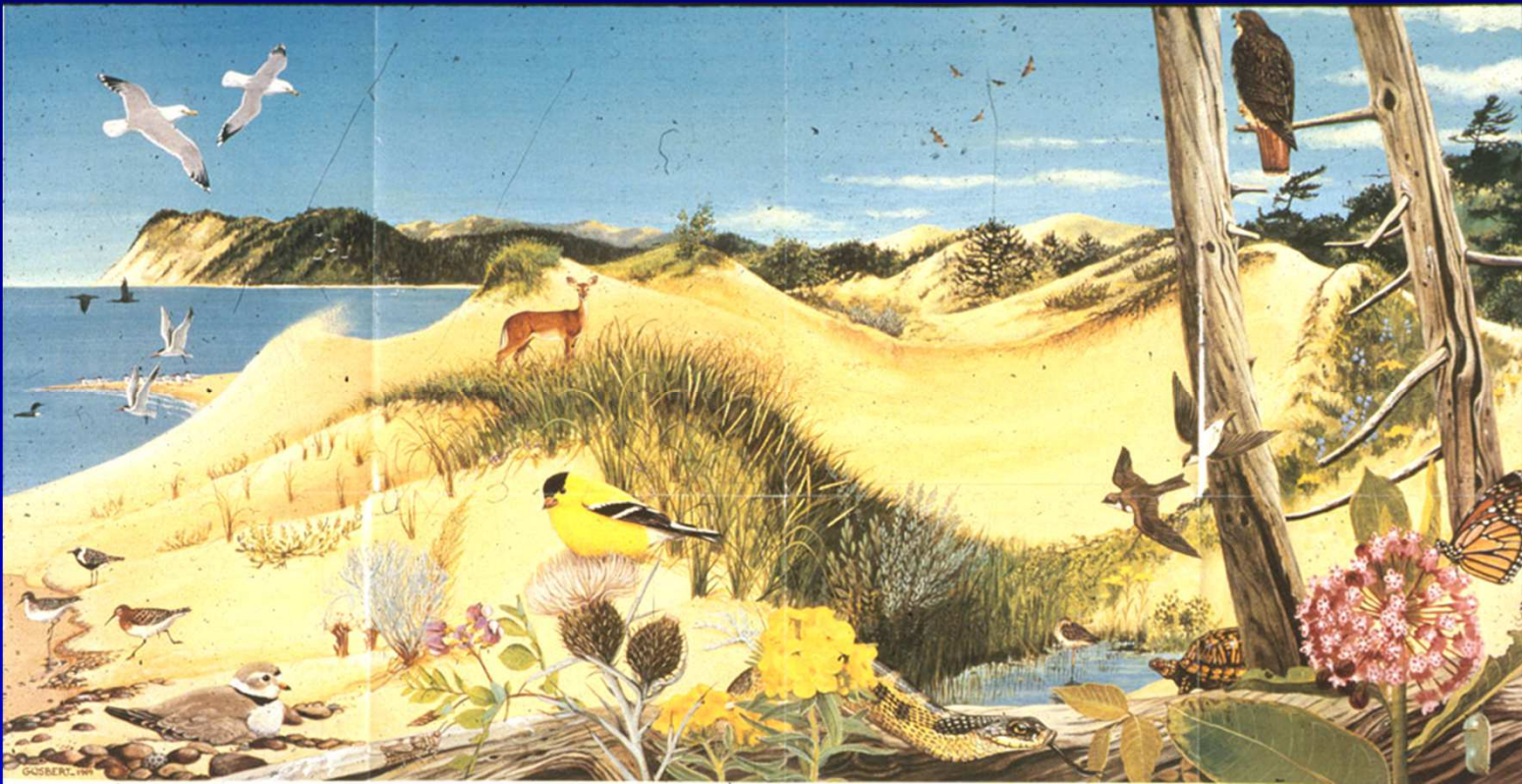


Great Lakes plovers in winter



Umbrella Species

Conservation of the Piping Plover in the Great Lakes Region: A Landscape-Ecosystem Approach



- Piping Plovers are an umbrella species for the Great Lakes coastal ecosystem

Funding: US Forest Service, U of MN, U of Michigan Biostation

Questions?

